

# **U.S. EPA TECHNICAL SUPPORT PROJECT BUSINESS SESSION SUMMARY**

**April 22-25, 2003  
The Crowne Plaza Hotel  
Seattle, Washington**



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Technical Support Project

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## **U.S. EPA TECHNICAL SUPPORT PROJECT CO-CHAIRS**

### **Engineering Forum:**

**Sharon Hayes, Region 1 • William Rothenmeyer, Region 8 • Neil Thompson, Region 10**

### **Ground-Water Forum:**

**Richard Willey, Region 1 • Bernie Zavala, Region 10**

### **Federal Facilities Forum:**

**Stacie Driscoll, Region 3 • Jim Kiefer, Region 8 • Chris Villarreal, Region 6**

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## **ENGINEERING FORUM**

### **Introductory Remarks**

Sharon Hayes (Region 1), Bill Rothenmeyer (Region 8), and Neil Thompson (Region 10), Engineering Forum co-chairs, welcomed members and guests to the Technical Support Project (TSP) meeting and provided an overview of the Engineering Forum (EF) business session agenda. The co-chairs also welcomed Karen Mason-Smith (Region 5), Leo Romanowski (Region 4), and Carlos Sanchez (Region 6) to their first TSP meeting.

### **New TSP Meeting Format**

Traditionally, the TSP organizes and participates in two meetings each year. The 5-day long spring and fall meetings are usually held 6 months apart in locations throughout the country. The three forums (Engineering, Federal Facilities, and Ground Water) rotate the lead responsibility for planning the meeting logistics, including selecting a location. Headquarters funds the lodging (up to a maximum of 5 nights per person) for Regional personnel participating in the meetings. Usually 2-3 days are reserved for joint sessions on technical topics of mutual interest to all three forums, with the remainder of the week set aside for forum business sessions, field trips, training, or forum-specific technical presentations.

Kelly Madalinski (TIO) explained that TIO has decided to shorten the length of one of the semi-annual meetings from 5 days to 2 days. The shorter meeting will focus primarily on business sessions and will not involve coordinated joint sessions or field trips. Some forums may choose not to meet at all, depending on work load. Headquarters will be responsible for locating and timing the shorter meeting. Kelly indicated that the short meetings will likely be held at locations in the central U.S. TIO will continue to cover the costs of lodging up to a maximum of 3 nights per person. The remaining semi-annual meeting will be 5 days and will involve joint sessions, field trips, technical sessions, and, when appropriate, training or workshops. Lessening the duration of the second meeting will ultimately reduce the planning burden on the individual forums, lower costs, and encourage the use of other tools to share and exchange information.

### **TIO Reorganization**

Office of Solid Waste and Emergency Response (OSWER) Assistant Administrator Marianne Horinko has proposed a major reorganization of OSWER to better address EPA's expanded role in homeland security. As part of this reorganization, TIO will be placed within the Office of Emergency and Remedial Response (OERR). The move is intended to expand the technical expertise within the Superfund program office and intensify its focus on innovation. Although housed in OERR, TIO would continue to support all OSWER programs, consistent with Horinko's One Cleanup Program. The new office has tentatively been called the Office of Superfund Remediation and Technology Innovation (OSFRTI). Walt Kovalick (TIO) will go from an Office Director to a Division Director. Kelly said TIO's relationship with the Office of Research and Development (ORD) will not be affected. Kelly does not foresee any changes that will directly impact TIO's support of the TSP in the near future.

### Agency Engineering Expertise Survey

Camille Hueni (Region 6) raised concerns that the Regions may be understaffed with engineers. She asked EF members to query RPMs to get an idea of the number of engineers and their areas of expertise within each Region. Armed with this information, Camille suggested that the Forum draft a letter to senior management notifying them of the loss of engineering expertise and the potential impacts of this knowledge drain on Agency efforts. Many EF members and friends agreed with Camille that true process engineers are becoming a rarity within the Agency. Changes to government retirement plans and an aging workforce may accelerate the loss of engineers within EPA.

EF members agreed that any communication to management should acknowledge the importance of engineers to future post construction work at Superfund sites. With dwindling state funds and a growing number of construction completes, Agency engineers will be essential to the successful completion of 5-year reviews and other post construction activities. Engineering technical expertise is also greatly needed at RCRA sites.

At present, it appears as though the Agency is not replacing departing engineers, but rather contracting the work to engineering and consulting firms. Many recently hired RPMs have little or no technical background, placing the burden of reviewing remedial process designs and related engineering activities on the dwindling number of professional engineers within EPA. Dave Reisman (NRMRL-Cinc.) noted that the RCRA Corrective Action office is developing 6 internet training seminar modules that will inform new RPMs about Agency resources available to them. A similar tool may be an invaluable resource for new RPMs in the Superfund program. Ed Mead (USACE) noted that USACE provides technical project planning courses. Ed noted that Heidi Novotny is the USACE contact for these courses; he would be happy to contact her if any EF members are interested in learning more about them.

Notifying Headquarters that more engineers are needed may not result in an increase in the number of qualified engineers who are hired because individual Regions have their own hiring practices and the final say in who is hired. EF members agreed that a letter to Headquarters could call attention to the problem and may result in an Agency-wide change in policy. This letter could also be distributed to managers in the Regions. Even if no additional engineers are hired by the Agency, this effort would be a good way to increase the profile of the EF and other engineering resources (ORD, HSTLs) that are available to Regional RPMs. Camille, Mike Gill (Region 9 HSTL), and Karen Mason-Smith (Region 5) agreed to frame a proposal that will be discussed at the National Association of Remedial Project Managers (NARPM) meeting in May.

### Issue Paper Updates

*Remedial Process Screening Data Collection Paper:* Ed Mead (USACE) distributed draft copies of his remedial process screening data collection paper for comment and discussion. The document contains two tables (one for water parameters and one for soil parameters) to guide remedial project managers in selecting and obtaining physical and chemical data relevant to remedy implementation. Parameters marked with an "X" are those that should be collected during the RI/RFI site collection phase(s). Parameters marked with an "O" are optional additional parameters that are needed for the final remedy selection. The document also contains two corresponding tables of lab and field analytical methods for these physical and chemical parameters. Getting this data prior to evaluating remedies can result in substantial savings because little time and money must be invested up front. These additional parameters will allow the decision makers to:

- Screen out technologies that are not applicable (e.g., SVE in tight soil) or cost effective;

- Determine whether additional treatment is necessary and the associated cost of this treatment;
- Arrive at more accurate cost estimates of the remedial alternatives, including better cost estimates for O&M; and
- Save time and money by not having to re-mobilize and go back to gather the data during the design phase.

Ed said the document still has some errors and needs to be fleshed out more completely, but it is ready for field testing. Ed asked EF members to review the draft one last time and to contact him if they think the tool could be used at a site in their Region. Dave Reisman (NRMRL-Cinc.) noted that an RPM in Region 9 used the matrix in the field and had a contractor expand the matrix by adding verbiage to the table, thereby increasing its length to 30 pages.

Ed indicated that ASTM is interested in publishing the document, but he wanted to gauge the Forum's interest in releasing it as an EF product. Members were enthusiastic about publishing the matrix as a Forum issue paper. The next step is to have ORD review the document, after which an external review must be completed. Dave Reisman commented that there might be issues with the matrix not complying with the provisions of the Americans with Disability Act if it is placed on the EPA website. Dave will begin the formal review process within ORD, fill out the necessary forms, and meet with the web staff to discuss issues that might arise if the matrix is placed on the web.

*Energy Audit Issue Paper and Energy Management Resources Guide for Waste Remediation Sites:* Mike Gill (Region 9 HSTL) updated the Forum on the status of the energy audit issue paper. The goal of the paper is to make project managers and others working on waste cleanup sites aware of energy saving/production opportunities on their remedial systems. Mike received several comments on the last draft of the energy audit issue paper that were incorporated into the revised draft. The draft final has been sent to TIO for review and, ultimately, publication. The paper begins with a background section, then presents several case studies describing energy saving considerations that can be employed at landfills and pump and treat sites. The paper also discusses the applicability of remedial system evaluations (RSEs) to energy work, reviews the use of contracts for assisting with energy savings, and presents web-based information references on the subject. Finally, the paper ends with a summary and recommendations for future efforts. Interested EF members and friends should e-mail Mike Gill for an electronic copy of the draft final. Mike will keep the EF informed about the TIO review and potential publishing dates.

In addition, Mike has secured funding from ORD to develop an energy guide for waste remediation sites. The goal of the project is to develop a 75-100 page "energy guidelines" document that is applicable to commonly encountered site remediation or restoration schemes, or the remediation technologies that require the greatest energy inputs, so that prevention technologies can be substituted. The consultant will be tasked with determining 5 of the most commonly encountered remediation systems that are the most energy intensive and that are designed to operate for longer than 10 years. For each of these systems, the guide will describe major elements and organize them according to energy utilization, range of energy inputs encountered, and potential for energy substitutions. The guide will also provide clear, detailed examples of potential energy production opportunities at waste cleanup sites and detailed information on several key tools that are identified in the issue paper. Other tasks planned under this project (but not under contract) include the formation of an Energy Stakeholder Advisory Group, development of informational web sites, and preparation of training materials. Work on the guidelines will begin in May 2003.

Camille Hueni suggested spotlighting Mike's energy audit issue paper on the CLU-IN website to raise the profile of this important work. Members also suggested communicating the findings to NARPM, RCRA, and the Superfund Redevelopment Initiative office.

*In-Situ Soil Treatment Issue Paper:* Gene Keepper (Region 6) reported that TIO has agreed to fund an update of the 1993 EF issue paper "Considerations in Deciding to Treat Contaminated Unsaturated Soils In Situ" (EPA/540/S-94/500), which can be found at <http://www.epa.gov/swertio1/tsp/download/unsat.pdf>. This issue paper grew out of a larger document that was published in 1990 called "Handbook on In Situ Treatment of Hazardous Waste-Contaminated Soils" (EPA/540/2-90/002). The updating of the issue paper is being coordinated by NRMRL-Cincinnati. Dave Reisman (NRMRL-Cinc.) has finalized the statement of work, and is awaiting a work plan from the contractor that will do the work. Each section of the paper will describe a different soil remediation technology and will list a contact person at ORD for further information. The names of EF members will also be included in the paper. Gene would like this update to be a "living" document, complete with hyperlinks that can be updated on a regular basis. Dave briefly discussed the ramifications of Section 508 of the Americans with Disabilities Act on the final product. The document may need to be reformatted if it is posted on the web to enable those with disabilities to access the entire issue paper.

*Updated Engineering Bulletins:* Dave Reisman said that OERR wants to update several engineering bulletins that were originally published several years ago. The Technology Transfer group will provide the funding and will update the papers. The bulletins that will most likely be updated include:

- In Situ Thermal Treatment;
- Phytoremediation;
- In Situ Bioremediation; and
- PCBs Remediation.

Engineering bulletins on biological and chemical dehalogenation (BCD), thermal desorption, SVE, and pump and treat may also be updated in the near future. In addition, a hard rock mining engineering bulletin has been proposed. Once the bulletins have been updated, the EF will have an opportunity for review and comment. Steve Kinser (Region 7) will coordinate the EF review.

### **ORD Update**

Dave Reisman indicated that ORD is in the process of building a new building in Cincinnati. He also discussed the reorganization of ORD. He assured members that the high quality of technical service will remain the same. Among the other activities or trends at NRMRL:

- RCRA requests have increased;
- The laboratory will provide assistance to the first mining brownfields site in Region 8;
- The laboratory will work with Region 10 on the interim ROD at the Bunker Hill site, reviewing EPA's procedures, guidance, and other activities;
- The deadline for participating in the Superfund Innovative Technology Evaluation (SITE) Program is May 31.

### **Updating the RD/RA Handbook**

Steve Kinser (Region 7) noted that, although not much has been done in response to the EF decision to update the remedial design/remedial action (RD/RA) handbook, he is still committed and would like to move forward with the project. Gene Keepper (Region 6) expressed similar sentiments. Fran Costanzi (Region 8) originally proposed the project, but has not been able to move forward due to workload

demands. Steve suggested that the RD/RA handbook be a main focus of the next spring mini-meeting. Steve will send a conceptual model and straw proposal to the co-chairs for review and comment.

### **Engineering Forum Expertise Survey**

The EF decided that the list of EF members' areas of expertise should be posted on the TSP website. The goal is to have the updated expertise list on the web before the fall meeting. Only current/active members will be listed as experts or contacts and, therefore, are required to complete the survey. Mark Granger (Region 2) will make the changes to the list and update the Forum on future EF calls. The expertise list will be updated yearly.

### **Co-Chair Election**

Neil Thompson's co-chair term ends this spring. The election of his successor will take place via email. EF members should send nominations to Sharon Hayes or Bill Rothenmeyer by noon on Wednesday, June 4, 2003. Nominations will be announced during the June 4 teleconference, after which members can cast their votes via email. The new co-chair will be announced before the July teleconference. Only active members can be nominated, and self-nominations are encouraged. The new co-chair will be elected for a two-year term that will expire in spring 2005.

### **Evergreen List**

The EF identified high priority topics for future issue papers and technical topics from the evergreen list. After reading through the current list, members removed topics that were redundant or for which work was being done by other offices, agencies, or organizations. Several topics were reprioritized to reflect the changing trends in remediation technologies and methods. Mark Granger will incorporate the edits into the document and redistribute it to the EF. EF members and friends can submit new topics or issues to Mark at any time, and he will add them to the list.

## GROUND WATER FORUM

### Acknowledgment of Work Conducted by the Ground Water Forum

Co-chair Bernie Zavala (Region 10) acknowledged the following people for work they had done on behalf of the Ground Water Forum (GWF), since the Pensacola meeting (11/02).

- Kay Wischkaemper (Region 4): Review of proposed *Guidance for Soil Screening Levels for PCBs* for Ken Lovelace and Marlene Berg (OERR). (Status: Comments have been incorporated and returned to reviewers)
- Luanne Vanderpool (Region 5), Kathy Davies (Region 3), and work group: Review of *How-to Guide for Capture Zone for Ground Water Pump and Treat System* for Kathy Yager (TIO). Vince Malott (Region 6) will present the findings to RPMs at the next NARPM meeting.
- René Fuentes (Region 10) and work group: Review of sediment guidance for Lea Evison (OERR).
- GWF members who sent comments to Jeff Van Ee (NERL-Las Vegas) as part of the of a CD-ROM on site characterization. (Status: Two CD-ROMs are due out the end of the calendar year.)
- Dick Willey (Region 1), Kathy Davies, and other GWF members: Review of *Guidance on Applied and Potential Technologies for DNAPL Investigations* for the Technology Innovation Office (TIO).
- Greg Lyssy (Region 6), Dick Willey, and other GWF members: Review of two drafts of *An Introduction to Characterizing Sites Contaminated with DNAPLs* for ITRC.
- Helen Dawson (Region 8): Review and development of guidance on ground-water contamination intrusion into indoor air.

### Future of Biannual TSP Meetings

Rich Steimle (TIO) explained the new schedule to be implemented for the TSP biannual meetings. TIO has been asked to cut back about 30 percent of the TSP costs to stay in line with the overall cuts in the Superfund program. Therefore, TIO can support only one traditional four-day/five-night meeting; the second meeting must be just two days and three nights. Rich envisions the shorter meeting as being more of a workshop to develop specific issues and to discuss forum business. The meeting would not include field trips, could include invited speakers if relevant to issues being discussed. The short meetings will be held mid-continent (e.g., Chicago, Kansas City, or Dallas) to cut back on travel time and costs for each Region. The co-chairs of each forum will be responsible for developing their own agendas for the short meeting. Rich noted that the Federal Facilities Forum prefers to schedule the long meeting during the fall because of the number of other meetings held in the spring. Therefore, the Fall 2003 meeting will be a 4-day meeting planned by the GWF.

The consensus among GWF was to hold the Fall 2003 meeting in the northeast (candidate locations are Niagara Falls, Trenton, NJ, and Storrs, CT) and focus on a fractured bedrock theme. Kevin Willis (Niagara Falls), Kathy (Trenton, NJ) and Dick (Storrs, CT) will further investigate opportunities at these locations and report back to the GWF on the next teleconference call (June 5).

Rich Steimle said TIO was about to issue a grant for setting up an International Bedrock Conference in 2004. They have not picked a location or date yet but it will be in the US.

### Reports from Work Groups

*Ground Water/Surface Water Interactions Guidance:* Bruce Duncan (Region 10, Ecological Risk Assessment Forum) provided an update on the joint GWF/Ecological Risk Assessment Forum guidance on ground water/surface water interactions. The original concept for the guidance was to stress that the transition zone must be evaluated. The focus has since changed to emphasize

management decisions concerning risk evaluation, establishing cleanup levels, and determining remedial success when there is a transition zone issue. The guidance emphasizes the importance of including transition zone issues in the problem formulation stage of the risk assessment and the development and refinement of conceptual model as data are collected. It includes a discussion of the tools that can be used to support the decision making process. The next step in the guidance development is to have the joint subcommittee of the two forums review what the ecologists have put together along with the hydrogeological revisions. Following this review, the draft guidance will go to full forum review as well as outside peer review. After comments are incorporated, the guidance will be submitted for OSWER policy review.

*Question:* How does the guidance address contaminated sediments?

*Answer:* It discusses the various tools that can be used to evaluate contaminated sediments.

*Question:* Will the guidance address the reverse situation in which surface water flowing through contaminated sediments impacts the ground water?

*Answer:* No.

*Question:* How will the report be distributed?

*Answer:* A limited number of hard copies will be printed and a PDF file will be posted on the Ecological Risk Assessment Forum and GWF websites.

*Question:* Does the guidance address what to do when the chemical of concern does not have the appropriate toxicity data?

*Answer:* That is an issue for any risk assessment, involving not just the transition zone. Therefore, it is not addressed.

*Capture Zone Guidance:* Luanne Vanderpool indicated that Kathy Davies is working on the training component of this guidance. Luanne has compiled all the GWF comments on the guidance, and these were conveyed to the Ground Water and Ecosystems Restoration Division in Ada in February who later passed them on to authors at GeoTrans. GeoTrans will produce a new draft before the beta training sessions begin. Kathy Davies explained that there also are plans to develop a two-hour training module for the NARPM meeting. Comments on the training from the NARPM attendees will be used to shape the full training presentations. Vince Malott will introduce the NARPM module, and GeoTrans will provide the remainder of the training. Matt Charsky (OERR) noted that the course has been well received by the RPMs and the training module at NARPM is already full.

A draft of the one-day training course is expected to be available for review by the end of the summer. The course will consist of a 2 hour introduction aimed at RPMs that will provide an overview of the issues. The remainder of the session will be technical. The two beta sessions will be given in Regions 3 and 9 in either September or October 2003. Comments from these will be used to modify both training materials and the guidance document, which will then be finalized. Presentation of a finalized version of the training will occur in Regions 4 and 7 in 2004. It was suggested that these be presented in March.

## **ITRC Work Groups**

*DNAPL Work Group:* Greg Lyssy provided an update on the DNAPL guidance. In April 2002, the GWF was asked to review the document. Members submitted a number of comments to the ITRC work group in September. In December, the ITRC indicated that they had accepted the majority of the comments. In March 2003, the ITRC contacted Greg and said and asked if the GWF would look at the

revision. Greg forwarded the revision to Rich Muza (Region 8) and Dick Willey for review, and sent their comments to the ITRC and the lead author, Mike Smith. The ITRC changed the name of the guidance to *Introduction to Characterizing Sites Contaminated with DNAPL*, which should be finalized soon. Dick Willey explained that this document, unlike others the ITRC has produced, is not scheduled to go to individual states for their concurrence. He believes that the guidance would benefit from another round of review from different eyes.

*Diffusion Sampler Work Group:* Dick Willey reported on the activities of the ITRC's work group on passive diffusion samplers. The work group's guidance document will be ready for the next level of review in mid-summer 2003. This review will include a technical review by the states for their concurrence. At the same time, the guidance will also be submitted to some federal agencies for their review. Dick suggested that the guidance be submitted to the GWF for review as well. The guidance provides new insights and materials to the earlier USGS document (WRIR 01-4060 and 01-4061), which provides the technical basis for the ITRC document. A GWF work group for reviewing the guidance was formed: Kathy Davies (Chair), Curt Black (Region 10), Bill Brandon (Region 1), Vince Malott, Bill Pedicino (Region 7), Kay Wischkaemper, and Steve White (USACE).

### **One Cleanup Program**

Ken Lovelace explained that Marianne Horinko, Assistant Administrator to OSWER, has requested a similar approach to site characterizations and cleanups across all offices that have such programs (e.g., Superfund, Brownfields, RCRA, and UST). Various groups have been assembled to accomplish this goal. One is the Senior Cleanup Council (SCC), which includes division directors from all of the cleanup programs, enforcement personnel, and several regional representatives, although it doesn't specifically include the Office of Water. The current plan is to establish a website for information exchange and to create topic task forces that will develop ideas and recommendations to be presented to the SCC. There are three task forces: site assessment, long-term stewardship, and ground water. The first two are in the planning stage.

Exactly how the task force idea will work is not clear. Ken said one idea was to look at ground-water source protection areas and compare the cleanup approaches that each of the programs have for them. He also noted questions coming from his management to develop issue/option papers on topics such as:

- Why does it take so long to clean up ground water?
- Why do we clean up water that is not currently used?
- Why try to clean up the entire plume?
- How do we establish when cleanups are finished?
- What can we do to move the program forward?

Senior management has indicated to a number of groups that they have a place at the table when policy changes are considered. These groups include stakeholder groups, industry groups, public interest groups, state regulators, state government, National Governors Association, tribal groups, and the EPA regional offices. The plan is to actively include these groups in the development of the policy. Ken would like the GWF to help him in developing the issue/option papers.

Dick Willey, who has been attending the ground water task force (GWTF) meetings, offered to send GWF members information on the GWTF website and other issues. Dick discussed how the mechanisms to implement regional pilot projects might work and how the GWTF might influence this.

## Issue Paper Update

Dave Burden provided an update on the status of outstanding issue papers being prepared by the Ground Water and Ecosystems Restoration Division (GWERD) in Ada:

*Long-Term Monitoring of Natural Attenuation:* All revisions to this issue paper have been incorporated, and Headquarters has reviewed it. It will be published soon as a joint ORD/OSWER technical guidance with a publication number.

*Site Characterization for Monitored Natural Attenuation:* Dynamac is formatting the materials received from Gary Robbins (University of Connecticut) and Mike Barcelona (University of Michigan) to address the issues raised in the annotated outline. They are also preparing figures and tables and identifying any additional areas that may require additional input from Robbins and Barcelona. Dave anticipates having a draft ready for GWF review by summer.

*Measurement of Field Parameters in Ground Water Sampling:* This issue paper is being reviewed by one internal and two external reviewers. These reviews should be completed by the end of June. GWERD will incorporate the comments, then the document should be ready for publication. The GWF expressed a desire to look at the revised product one more time. Dave agreed to provide a copy of the revised issue paper as well as the response to comments to the GWF. Members expressing a desire to receive a copy were: Kathy Davies, Mark Henry (Michigan DEQ), Brian Lewis (California DTSC), Kendra Morrison, Kevin Willis, Steve White, Dick Willey, and Bernie Zavala.

*Ground Water Uncertainties:* The latest draft of the issue paper (about 50 pages) was provided to Ruth Izraeli on April 9, 2003. GWERD is waiting for the GWF's comments. The issue paper still needs an official title. Ruth said she was looking for a five week turn around on the GWF review with comments due June 7<sup>th</sup>. The following people are either part of the work group or agreed to be reviewers: Bruce Duncan, René Fuentes (Region 10), Jeff Johnson (Region 7), Kay Wischkaemper (or Bill O'Steen), Luanne Vanderpool, and Kevin Willis. Ruth asked Dave Burden to involve Steve Acree (GWERD-Ada) in the effort.

*MNA for Inorganic Contaminants in Ground Water:* The deadline for the next draft of this issue paper is May 2, 2003. The focus of the paper remains ground water, although there is some discussion of the unsaturated zone. The next meeting of the writing team will be in Dallas (May 21). They expect to have a review draft ready by fall of 2003. Ken Lovelace (OERR) indicated that it is still a decision framework document, not policy. Because of the controversy of the subject, GWERD is allowing a full year for review, so Dave doesn't expect a final document until after fall 2004. The GWF work group that will review the fall 2003 version consists of: Kathy Davies (chair), Bill Brandon, Jeff Johnson, Steve Mangion, Rich Muza, Howard Orlean, Steve White, and Bernie Zavala.

## Innovative Technologies Fact Sheets

Ruth has received all the GWF's comments on the draft recirculation well fact sheet and will prepare a draft final soon. Bernie agreed to e-mail the draft final to the GWF for a final review when ready.

## Data Management

Andy Crossland (Region 2) briefed the GWF on efforts to standardize data formatting. Six Regions (1, 2, 3, 4, 5, and 8) and Headquarters are participating in the effort with an objective to standardize field and laboratory data along with location information so that it can be readily exchanged electronically using whatever data management software the user chooses. The package has been named Multimedia

Environmental Electronic Data (MEED). Region 2 has started using the system and has sent some data to Region 8 for entry into STORET. STORET will provide the ultimate archive for the data.

A meeting was held in Chicago earlier this year to discuss progress and strategies. The meeting was attended by Andy, Dave Jenkins (Region 4), Marty McComb (Region 8), Dave Wilson (Region 5), and Tony Jover (Headquarters), who is in charge of data management for OSWER. Andy is writing a description of the existing pilot programs for Tony to use in approaching his management for more resources and backing. They are trying to develop a data dictionary of existing systems (e.g., FORMS II Lite and the Contract Laboratory Program) to get agreement on common names. Region 4 has been loading a number of data sets, and Dave Jenkins has gotten the support of his management so he is also interacting with other programs (water, air) and with the laboratory in Athens. Andy stressed that they are looking to bring other Regions and programs into the standardization effort, thus they need “champions” in these regions and programs to push for it. He asked that any GWF members interested in being a point of contact/advocate for their region to contact him for more information.

Bernie invited Matt Gubitosa, a Region 10 data manager, to the discussion to ask his opinion on the data management system that Andy is advocating. Matt responded that it would not be easy to implement in Region 10. For various reasons, Region 10 does not put data into a central repository. Some programs discourage accessibility by anyone but program staff, so Matt anticipates problems in getting EPA-operated laboratories to change. He noted that the main roadblock is that there is no national policy on what to do, and his management thinks when you use common data archives you are subsidizing other programs. Andy explained that Region 10 wouldn't necessarily have to change what they are doing but they would have to agree on common data names and format so anyone can access the data with their local tools.

Brian Lewis (CA DTSC) mentioned that the Lawrence Livermore National Laboratory has created a system (GeoTracker) for the California UST program and the state legislature is considering requiring a state-wide unified program, which will likely be GeoTracker.

### **1,4-Dioxane**

Each Region provided an update on their 1,4-dioxane activities:

- Region 10: Bernie said he had given Kathy Davies' presentation to his group. At a TCE site where they are doing both above ground air stripping and in-well air stripping they have found 1,4-Dioxane at 5-6 µg/L. He has talked with regional managers and they are interested in pursuing the matter further. Also, the state of Washington included the subject on their hydrogeological meeting agenda.
- Region 9: Herb Levine said Tom Mohr had spoken to RCRA and Superfund staff several years ago and they have been looking for 1,4-dioxane since then. He also said that when they look for 1,4-Dioxane, they invariably find it whether the site is considered a trichloroethene (TCE) or trichloroethane (TCA) site. Region 9 has also asked the military to test for it at all their sites.
- Region 8: Rich Muza did not know of any work on it to date.
- Region 6: Region 6 is not currently looking for 1,4-dioxane at sites.

- Region 5: Luanne Vanderpool indicated that before Doug Yeskis left the Agency, they had identified several sites in Region 5 with 1,4-dioxane, but she has not done anything since.
- Region 4: Bill O'Steen said that Region 4 tested three TCA sites, but had not detected 1,4-dioxane. He did not know what method was used for the analysis or the detection limits. He anticipates a weak response from the Region 4 project managers on the survey form.
- Region 3: Kathy Davies said that Region 3 asked a solvent release site with two pump and treat wells and known TCA contamination to test for 1,4-dioxane. 1,4-dioxane was detected at 92 µg/L. Also, in a borough where air stripping is used to treat the municipal water supply, the responsible parties tested the treated water and consistently found 52 µg/L of 1,4-dioxane throughout the two strippers and at the tap. The PRPs have offered to provide bottled water to the residents until they can locate an alternative water supply. Another issue at this site is what to do about the remedial technology. The air strippers treat other volatile organics but do not treat the 1,4-dioxane. Neither does carbon. The PRPs have investigated other technologies and found that oxidation works but is expensive. They have proposed continuing the stripper operation and discharging the water (and 1,4-dioxane) to an intermittent stream bed. The ecological risk numbers for 1,4-dioxane are fairly high, but with the human health consumption numbers being so low, the state is reluctant to grant the PRP a discharge permit.
- Region 2: Andy Crossland asked Region 2 staff if anyone has specifically sampled for 1,4-dioxane, and the response was no. They have identified sites that have TCA and have targeted them for sampling at a later date.
- Region 1: Dick Willey said that Region 1 has two sites with confirmed high-level 1,4-dioxane contamination. The Regional laboratory now has the capability to analyze for 1,4-dioxane with low ppb level detection limits. The risk assessors have been informed of the problem, and Dick expects that they will sample three to four more sites in the near future.

Brian and Tom Mohr (Santa Clara Water Control Board) led the discussion on the proposed survey form on 1,4-dioxane testing. Tom said that the Water Control Board had successfully used both SW-846 Method 8260 in a selective ion mode and Method 8270 with liquid/liquid extraction. The former costs about \$150 per sample, and the latter can run \$250-\$300 per sample. He said that they were getting better results from the 8270 method.

The GWF agreed to the following changes to the survey form:

- The form should solicit information about RCRA sites and have a space to include the EPA identification number.
- The form should include a question about the analytical method used and the detection limit achieved.

The GWF agreed to the following changes to the cover letter:

- Modify the text to include RCRA sites.
- Modify the text to de-emphasize the importance of TCA so it doesn't suggest that if no TCA is suspected at a site, it shouldn't be considered for 1,4-dioxane testing.
- Modify the last paragraph to discuss actual test methods and costs.

Ken Lovelace mentioned that he ran a search to identify Superfund sites where TCA has been identified. He offered to forward the list to the GWF. Kathy has developed a fact sheet on 1,4-dioxane and will also forward it to the GWF.

### Old Topics

- *Operation and Maintenance Monitoring Well Field SOP.* Kevin Willis indicated a draft outline for the SOP is being reviewed. He should have a new, agreed upon outline in the next few weeks. The SOP will eventually be presented in a fact sheet format.
- *Soil Gas Surveys.* Kevin said that he has tried to assemble a group of soil gas survey experts to produce a paper on the best way to conduct them. He was unsuccessful in getting their cooperation, and hence has not gotten very far on the work. The main issue he'd like to address regarding soil gas surveys is not their general validity, but rather their usefulness in evaluating ground-water contamination to indoor air problems since they don't seem to be very predictive of indoor air concentrations. The use of soil gas surveys in investigating indoor air problems varies among the Regions and states. Region 2 will sample indoors with a Summa canister test, where in California sampling in the house is the last resort. Brian Lewis reported that soil gas surveys are used to aid in characterizing the ground-water plume. Once there is a good understanding of the plume, then the State might consider sampling in houses that appeared to lie in its path. Kevin said that he will continue to collect data on the issue; however, the fact sheet project is on hold.

Brian mentioned that the DTSC is sponsoring an indoor air symposium in the San Francisco Bay area on September 30 and in the Los Angeles area on October 1. The symposium will include Paul Johnson and Robbie Ettinger to discuss the indoor air issue with specific emphasis on what data should be collected if an indoor air problem is suspected. Brian added that he will send California's 12-page "how to" document on soil gas monitoring to the GWF members.

- *Micro/Macro Ground Water Sampling Issue Paper.* Kathy Davies said the work group could not agree on the scope of the issue paper. The GWF discussed the pros and cons of various approaches to the issue paper and decided to put the paper on hold for further discussion during the upcoming spring short meeting. Kathy will prepare a draft outline for the paper in the interim.
- *NAPL Alliance.* Randy Breeden (Region 8), who was the GWF contact for this project, has left for a different assignment. Currently no contact point with the Alliance. Randy had sent out copies of his training course for GWF review, but has received no comments. The GWF decided to wait for the Alliance to contact them if they want their help.
- *Statistical Training and Guidance.* The GWF discussed the value of having a statistical guidance to refer to when negotiating how to statistically evaluate ground-water data at sites. The co-chairs volunteered to draft a letter to Headquarters saying the GWF thinks such a guidance would be an important tool for the Regions and should be completed. The GWF also discussed statistical training and the mechanism for providing it.
- *DPT Guidance.* The DPT guidance the GWF had reviewed quite some time ago is still being revised at Headquarters. Bernie Zavala offered to contact Rob Hitzig (OERR) to request an update on the guidance during the next GWF conference call (June 5).

## New Topics

- *Long-Term Monitoring Optimization Tools for Ground-Water Monitoring Networks.* GeoTrans, Inc. has nearly completed a project report that Kathy Yager (TIO) wants the GWF to review. In addition, USACE is developing a white paper on this topic, and she wants GWF input on what it should contain. Bernie will distribute the e-mail that Kathy sent him and he will report back on the subject in the June conference call.
- *Application of Flow and Transport Optimization Codes to Ground Water Pump and Treat Systems.* Parsons is comparing a code that they developed to one developed by DoD. Parsons examined well-characterized sites to determine which existing wells should be included in a long-term monitoring program and which ones could be eliminated because they were providing redundant information or information that was not needed to evaluate the system performance. Bernie will obtain more information on what is required of the GWF and will report back in June.
- *Soil Sampling of the Capillary Fringe.* Mark Henry (Michigan DEQ) is writing an operational memorandum for DEQ on sampling the capillary fringe. He noted that the capillary fringe is often overlooked in investigations even though it can be a sink for contaminants. The rising and falling of the water table through the capillary fringe can add or subtract contamination from a plume, which can make data interpretation difficult. When conducting a site characterization, Mark often uses a Geoprobe to locate the water table then moves a few feet over and takes a four-foot core just above it. He screens the core with a total organic vapor. When the water table is less than 25 feet below ground surface, he uses a peristaltic pump in the rods to determine the water table depth. When the pump tube contacts ground water, he takes a sample and analyzes the head space concentrations of volatile contaminants. If the result is positive, Mark collects cores for further analysis.
- *New Sampling Tools.* Mark Henry demonstrated some new tools he has developed. One is a portable peristaltic pump that is constructed from a hand-held drill and a peristaltic pump head. The drill has adjustable speeds and an on-off switch. The drill pump head tubing can be attached to the stainless steel (316) pore water sampling rods that he developed to gather whatever volume of water or soil gas from soil or sediment is needed for analysis. Samplers are available with ¼ and ⅜-inch inside diameters. The longest sampler is 6 feet. For deep sediment sampling or sampling in deep water, he uses the same stainless steel sampler design but modified to so it can be connected to plastic electrical conduit tubing. The tubing comes in 10-foot lengths that can be joined together with clamps. The protective rod that fits inside the sampler to prevent water and sediments from entering is attached to a wire line and can be pulled out to allow water to enter when the desired sample depth is reached.

Mark explained that a good rule of thumb of determining where to look for contamination entering a surface water body is to measure the distance between the top of the water table and the top of the contaminant plume and then sample that distance out in the surface water. The ground-water flow lines tend to maintain a more parallel heading before intersecting the surface water. There is an issue of preferential flow into the surface water where the intersect is not a flow “front” but rather discrete zones. In an infrared fly over survey of a shallow surface water during summer, it was possible to show where zones of cooler ground water were upwelling into the warmer surface water.

To avoid the problem of drifting when sampling from a canoe, Mark drives two poly tubing probes into the sediments to the port and starboard to stabilize the boat. This cannot be done, however, in high currents. Sufficient tubing can be supplied when using the peristaltic pump to allow the boat to move without stressing the tubing.

- *TI Waivers Study.* Malcolm Pirnie is studying TI waivers for the Army Environmental Center and conducting a survey of regional offices. The thrust of the survey is to determine individual regional TI procedures. The group debated the pros and cons of participating in the 45-minute telephone survey and suggested that Regions should not participate individually because consistency in responses requires Headquarters coordination and the involvement of Regional management.
- *Cost Estimating Paper.* Kevin Willis raised the need for a paper on estimating the costs of characterization activities. He explained that RPMs do not know how much field activities should cost and hence are cannot adequately evaluate contractors' proposals. Kevin offered to check to see if there are any manuals or papers currently available. If not Curt Black (Region 10) and Bill O'Steen volunteered to help in developing one.
- *Acetone in Monitoring Wells.* Jennifer Sutter (Oregon DEQ) asked the GWF whether anyone had problems with acetone contamination in monitoring wells that may be associated with bentonite pellets. Kathy Davis responded that there had been a bad batch of contaminated pellets produced, but it was not a systematic problem. Kathy and Dick Willey offered to find information on the topic and e-mail it to Jennifer.

## **FEDERAL FACILITIES FORUM**

### **Introduction and Welcome**

Federal Facilities Forum co-chairs Chris Villarreal (Region 6) and Stacie Driscoll (Region 3) welcomed members and guests to the meeting and provided an overview of the Forum's business session agenda. Discussions began with a summary of the Forum's participation agreement, which members are requested to complete and forward to EMS, Inc.

### **Regional Roundup**

Additions to the "regional roundup" compiled during the Forum's March 2003 teleconference were collected. The expanded list of Regional issues and major activities at federal facilities was confirmed to include:

#### *Region 1:*

- South Weymouth privatization
- Fort Devens contract mechanisms
- perchlorate contamination (potentially at the Massachusetts Military Reservation)
- 1,4-dioxane contamination (at South Weymouth Naval Air Station)
- institutional controls (ICs)
- discrepancies between DOD cleanup performance metrics and progress tracked by EPA

#### *Region 2:*

[not reported]

#### *Region 3:*

- perchlorate contamination (at Aberdeen Proving Ground)
- ICs and post-ROD authority
- the Regional FUDS inventory

#### *Region 4:*

- perchlorate contamination
- land use controls and post-ROD authority
- involvement with the National Association of Regional Project Managers (NARPM)

#### *Region 5:*

- unexploded ordnance (UXO)
- ICs and post/ROD authority
- transfer of closure materials (depleted uranium) from DOE's Oak Ridge National Laboratory
- fixed-price contracting for cleanups

#### *Region 6:*

- perchlorate contamination and pilot studies
- a potential waiver for technical infeasibility regarding ground water at Tinker Air Force Base
- insufficient site characterization and ground-water monitoring programs
- asbestos contamination in soil at DOD facilities and its impact on property transfers
- the Army's performance and cleanup progress at BRAC sites
- Ft. Chaffe, AK, cleanup problems, most notably those concerning an abandoned incinerator

*Region 7:*

[not reported]

*Region 8:*

- perchlorate contamination (including Regional inventories and sampling efforts)
- ICs at Tooele Army Depot
- UXO-related ROD development

*Region 9:*

- ICs

*Region 10:*

- perchlorate contamination
- Army performance in BRAC site cleanups
- ICs and post-ROD authority

*State of Missouri:*

- perchlorate contamination
- fixed-price contracting for cleanup
- FUDS maps
- long-term stewardship/ICs

*State of Virginia:*

- Navy federal facility agreements (FFAs)
- Air Force disputes
- signed FUDS maps

Difficulties at BRAC sites, a continuing problem among the Regions, was discussed in more detail. Members noted the possibility of Regional withdrawal from problematic BRAC cleanup projects, but confirmed the need for state concurrence at all non-NPL BRAC sites. Regional interpretation of EPA's role in meeting CERCLA requirements regarding findings of suitability to transfer (FOSTs) was found to vary. It also was noted that John Paul Woodley, Assistant Deputy Under Secretary of Defense for Environment, recently instructed the Army and Navy not to sign RODs until further notice regarding post-ROD requirements. Members were alerted to recent changes in the format of BRAC reports. Additionally, a multi-agency memorandum of understanding concerning long-term stewardship was completed March 3, 2003.

### **Federal Facilities Leadership Council Meeting Debrief**

The Forum co-chairs highlighted issues addressed during a recent meeting of the Federal Facilities Leadership Council (FFLC), many of which are similar to those faced by the Forum. Issues included: post-ROD authority, response to requests submitted under the Freedom of Information Act (FOIA), involvement of EPA's Federal Facilities Enforcement Office (FFEO), perchlorate contamination, long-term stewardship, development of an IC database, and interpretation of DOD's current policy regarding perchlorate investigations. The Forum co-chairs had provided to the FFLC an overview of the Forum's activities and its plans to hold future meetings in conjunction with the FFLC meetings. The FFLC plans to meet next in Baltimore, MD, during June 2003.

**Forum Work Products**

The Forum reviewed its listing of “Current Issues, Contacts, and Activities of the Federal Facilities Forum” and identified needed changes. An updated list (Table 1) was developed. Table 2 summarizes forum issues and members to contact for more information.

**Future of the Federal Facilities Forum**

Rich Steimle (TIO) explained that impending budget cuts to the Agency’s Superfund program require that a 25-30% cost savings be reached in TSP Forum operations. Considerable savings will be achieved by condensing one of the Forums’ semi-annual meetings from four days/five nights to two days/three nights each year. TIO recognized that the extensive meeting planning needed to hold four-day meetings twice each year distracts from the Forums’ productivity. TIO and FFRRO also recognized that linkage of selected Federal Facilities Forum meetings with the FFLC or NARPM would provide significant benefits. It was noted that ongoing reorganization of OSWER and the integration of Superfund and RCRA activities under the one cleanup program will affect the structure of meetings on an Agency-wide basis.

Negotiations will continue among TIO, FFRRO, and the Forums to establish a revised plan for future meetings. A cooperative agreement between EPA and the National Ground Water Association will provide a mechanism for renewed involvement of state representatives in the Forums.

**Headquarters/Federal Facilities Restoration and Reuse Office (FFRRO) Update**

Renee Wynn (FFRRO) welcomed members to the meeting, expressed appreciation for the Forum’s continuing cooperation with FFRRO, and emphasized FFRRO’s need for input from the group. Recent FFRRO accomplishments include development of contents for the Agency’s RODs policy, lead-based paint policy, and UXO policy, training, and handbook. Current organization changes within OSWER are anticipated to affect FFRRO, as well as the Forum. Wynn provided detailed FFRRO updates concerning the Forum’s major issues.

*Post-ROD Authority:* On March 5, 2003, EPA reached agreement with the Navy and Army concerning post-ROD authorities. DOD management, the Pentagon, and the Air Force, however, have not yet agreed to the principles outlined by EPA. It is anticipated that a better understanding of this issue’s status will be gained during current negotiations of a ROD for the Naval Amphibious Base Little Creek site in Virginia. Final decisions regarding post-ROD authorities, and in particular those made on the Little Creek site, are expected to affect approximately 50 DOD RODs (including 12 in Region 3, alone). Potential changes in DOD management also may impact post-ROD authority decisions. Until concurrence is reached, FFRRO recommends that Regions continue cleanup activities unless halted by this issue.

*BRAC ‘05:* The BRAC Commission may begin developing an additional base closure list in 2005. It is anticipated that the closure process will entail Pentagon selection of the facilities to be closed, DOD regional review of the closure list, and Congressional approval of the final BRAC closure list. Fiscal year 2006 budgets would reflect these closures.

**TABLE 1. Current Issues, Contacts, and Activities of the Federal Facilities Forum (May 2003)**

<b>Issue</b>	<b>Contacts (<i>Lead in italics</i>)</b>	<b>Accomplishments</b>	<b>Current Activities</b>
1. FUDS	Region 7, <i>Scott Marquess</i> Region 6, Mike Overbay	<ul style="list-style-type: none"> <li>✓ Provided significant input to FFRRO on draft FUDS policy, with two Forum members serving as principal authors</li> <li>✓ Reviewed Kansas and Ohio FUDS MAPs produced under EPA/Corps/state pilot</li> </ul>	<ul style="list-style-type: none"> <li>◆ Assist in implementing EPA FUDS Policy;</li> <li>◆ Provide input into FUDS inventory data parameters;</li> <li>◆ Review FUDS MAPs and participate in other FUDS pilot projects;</li> <li>◆ Advise forum of developments on DOD/ASTSWMO FUDS</li> </ul>
2. UXO	Region 3, <i>Steve Hirsh (acting)</i> Region 5, David Seely Region 6, Mike Overbay Region 8, Jim Kiefer Region 10, Ken Mallary Region 10, Harry Craig [recalled to Coast Guard]	<ul style="list-style-type: none"> <li>✓ Reviewed and commented on FFRRO's UXO draft policy and handbook</li> </ul>	<ul style="list-style-type: none"> <li>◆ Developing UXO Training Course (will be given in Austin, Texas and Santa Fe, New Mexico)</li> <li>◆ Continue assisting TIO in developing Internet training on analytical methods</li> </ul>
3. ICs/LTS	Region 3, <i>Stacie Driscoll</i> Region 1, Christine Williams Region 9, Glenn Kistner	<ul style="list-style-type: none"> <li>✓ Reviewed and commented on OSWER's ICs fact sheet</li> <li>✓ Reviewed and commented on EPA's interim IC policy for active bases</li> <li>✓ Assisted FFRRO in developing IC model language for decision documents</li> </ul>	<ul style="list-style-type: none"> <li>◆ Comment on EPA draft final policy for ICs at active bases</li> </ul>
4. BRAC	Region 6, <i>Mike Overbay</i> Region 8, Judith McCulley	<ul style="list-style-type: none"> <li>✓ Participated in BRAC In Progress Reviews</li> </ul>	<ul style="list-style-type: none"> <li>◆ Track Congressional and follow-on status of the Efficient Facilities Initiative</li> <li>◆ Track BRAC program changes and update the Forum as needed</li> </ul>
5. Perchlorate	Region 6, <i>Chris Villarreal</i> Region 10, Harry Craig	<ul style="list-style-type: none"> <li>✓ Developed Perchlorate Training Module for the Federal Facilities Remediation Training. Presented training module in Dallas, TX (January 2003) and in Washington, DC (April 2003).</li> </ul>	<ul style="list-style-type: none"> <li>◆ Working on the development of a soil and sediment collection method for perchlorate.</li> </ul>
6. Sediment	Region 8, <i>Judith McCulley</i> Region 3, Steve Hirsh Region 4, Robert Pope	<ul style="list-style-type: none"> <li>✓ Reviewed and provided comments on EPA's sediment remediation "principles"</li> </ul>	<ul style="list-style-type: none"> <li>◆ Review EPA sediment remediation guidance policy when issued</li> <li>◆ Review Navy sediment policy when issued</li> </ul>

7. Tribal Issues	[No one currently assigned]	✓ Submitted a request to Headquarters for RCRA sites to be added to the developing overlay of tribal properties	<ul style="list-style-type: none"> <li>◆ Track Headquarters roundtable discussions with tribes, states, and other agencies</li> <li>◆ Coordinate Forum/FFRRO communications with Carol Bass (FFRRO)</li> </ul>
8. DOE/Radio-active Waste	Region 4, <i>Jim Barksdale</i> Region 9, Glenn Kistner	✓ Organized radiation training at the Fall 2002 TSP meeting	<ul style="list-style-type: none"> <li>◆ Track DOE program changes and update the Forum as needed</li> </ul>
9. Vadose Zone	Region 8, Jim Kiefer Region 9, Glenn Kistner		<ul style="list-style-type: none"> <li>◆ Track status of EPA and DOE activities and update the Forum as needed</li> </ul>
10. Grain Bins	Region 7, <i>Scott Marquess</i>		<ul style="list-style-type: none"> <li>◆ Track status of site inventories and update the Forum as needed</li> <li>◆ Participate in or track results of Spring 2002 workshop in Kansas City</li> </ul>
11. PCBs in Paint	FFRRO, <i>Tracey Seymour</i>		<ul style="list-style-type: none"> <li>◆ Track EPA determinations and update the Forum on enforcement discretion</li> <li>◆ Track status and update Forum</li> </ul>
12. GPRA	FFRRO, <i>Tracey Seymour</i> Region 3, Stacie Driscoll		<ul style="list-style-type: none"> <li>◆ Develop proposal on new measures of success for site cleanup (GPRA)</li> <li>◆ Coordinate joint measures with FFRRO</li> </ul>
13. NARPM Coordination	Region 4, Robert Pope FFRRO, Tracey Seymour	<ul style="list-style-type: none"> <li>✓ Organized FF Panel for Spring 2003 NARPM Meeting</li> <li>✓ Established process for Forum/NARPM sharing of information and resources</li> </ul>	<ul style="list-style-type: none"> <li>◆ Continue providing Forum updates to NARPM</li> <li>◆ Coordinate Forum/FFRRO participation with NARPM</li> </ul>
14. FFLC Coordination	<i>Forum Co-Chairs **</i> Region 7, Scott Marquess	✓ Provided FFLC with information on Forum activities, issues, and points of contact.	<ul style="list-style-type: none"> <li>◆ Coordinate activities</li> </ul>

15. ITRC Work Team Coordination:			
UXO	Region 10, <i>Harry Craig</i> Region 3, <i>Steve Hirsh (acting)</i>	<ul style="list-style-type: none"> <li>✓ Provided significant assistance in development of UXO training</li> <li>✓ Served in ITRC chairperson capacity</li> </ul>	<ul style="list-style-type: none"> <li>◆ Continue assisting work team in development of UXO training</li> </ul>
Perchlorate in Ground Water	Region 6, <i>Chris Villarreal</i>	<ul style="list-style-type: none"> <li>✓ Established contacts, shared general information with work team, and obtained information on ITRC's technology transfer efforts</li> </ul>	<ul style="list-style-type: none"> <li>◆ Continue communication with work team</li> </ul>
DOE Gate 6 Technology	Region 8, <i>Judith McCulley</i>		<ul style="list-style-type: none"> <li>◆ Contact work team and identify team needs</li> </ul>
Long-Term Stewardship	Region 5, <i>Eugene Jablonowski</i>		<ul style="list-style-type: none"> <li>◆ Contact work team and identify team needs</li> </ul>
Small Arms Firing Range	[No one assigned]	<ul style="list-style-type: none"> <li>✓ Contacted work team and obtained information on ITRC development of two guidance documents</li> </ul>	<ul style="list-style-type: none"> <li>◆ Continue communication with work team</li> </ul>
Contaminated Sediments	Region 3, <i>Steve Hirsh</i> Region 8, <i>Judith McCulley</i>	<ul style="list-style-type: none"> <li>✓ Contacted work team leader</li> </ul>	<ul style="list-style-type: none"> <li>◆ Continue communication with work team</li> </ul>

\* Responsible for tracking related technical and policy issues, serving as points of contact for new information, bringing issues to the Forum for discussion when needed, and coordinating special projects such as data calls.

\*\* Forum Co-Chairs: Stacie Driscoll (Region 3), Jim Kiefer (Region 8), Chris Villarreal (Region 6)

**TABLE 2. Federal Facilities Forum: Issues and Lead Contacts (May 2003)**

Issue	Lead Contact(s)	Contact Information
1. FUDS	Scott Marquess, Region 7	marquess.scott@epa.gov, 913-551-7131
2. UXO	Harry Craig, Region 10 Steve Hirsh, Region 3 (acting)	craig.harry@epa.gov, 503-326-3689 hirsh.steven@epa.gov, 215-814-3352
3. ICs/LTS	Stacie Driscoll, Region 3	driscoll.stacie@epa.gov, 215-814-3368
4. BRAC	Mike Overbay, Region 6	overbay.michael@epa.gov, 214-665-6482
5. Perchlorate	Chris Villarreal, Region 6	villarreal.chris@epa.gov, 214-665-6758
6. Sediment	Judith McCulley, Region 8	mcculley.judith@epa.gov, 303-312-6667
7. Tribal Issues		
8. DOE/Radioactive Waste	Jim Barksdale, Region 4	barksdale.james@epa.gov, 404-562-8537
9. Vadose Zone	Jim Kiefer, Region 8	kiefer.jim@epa.gov, 303-312-6907
10. Grain Bins	Scott Marquess, Region 7	marquess.scott@epa.gov, 913-551-7131
11. PCBs in Paint	Tracey Seymour, FFRRO	seymour.tracey@epa.gov, 703-603-8712
12. GPRA	Tracey Seymour, FFRRO	seymour.tracey@epa.gov, 703-603-8712
13. NARPM Coordination	Robert Pope, Region 4	pope.robert@epa.gov, 404-562-8506
14. FFLC Coordination	Forum Co-Chairs: Stacie Driscoll, Region 3 Jim Kiefer, Region 8 Chris Villarreal, Region 6	driscoll.stacie@epa.gov, 215-814-3368 kiefer.jim@epa.gov, 303-312-6907 villarreal.chris@epa.gov, 214-665-6758
15. ITRC/Work Team Coordination: <i>UXO</i>	Harry Craig, Region 10 Steve Hirsh, Region 3 (acting)	craig.harry@epa.gov, 503-326-3689 hirsh.steven@epa.gov, 215-814-3352
<i>Perchlorate in Ground Water</i>	Chris Villarreal, Region 6	villarreal.chris@epa.gov, 214-665-6758
<i>DOE Gate 6</i>	Judith McCulley, Region 8	mcculley.judith@epa.gov, 303-312-6667
<i>Long-Term Stewardship</i>	Gene Jablonowski, Region 5	jablonowski.eugene@epa.gov, 312-886-4591
<i>Small Arms Firing Ranges</i>	[No one assigned]	
<i>Contaminated Sediments</i>	Steve Hirsh, Region 3 Judith McCulley, Region 8	hirsh.steven@epa.gov, 215-814-3352 mcculley.judith@epa.gov, 303-312-6667

*Encroachments:* EPA Headquarters formally supports DOD's "Readiness and Range Preservation Initiative," which calls for systematic integration of environmental management into all missions, activities, and functions. Headquarters recently expressed concern, however, that DOD has not cited examples of specific ranges where environmental restoration has negatively impacted DOD training. Due to the initiative's potential for adversely affecting the environment, EPA regional support of the initiative varies considerably. Although Congress currently is reviewing pending legislation on the issue, state support for the initiative is mixed. The initiative affects all federally-based environmental regulations applicable to active military ranges.

*Transformation of Installation Management:* In an effort to free installation commanders and major commands from formal responsibilities for base operations, the Army recently established the Installation Management Agency (IMA). Four IMA regions carry out these responsibilities, including environmental compliance. While the IMA now manages sites outside the Installation Restoration Program (IRP), the Army Environmental Center (AEC) manages IRP sites. As such, the AEC manages all Superfund issues and selected RCRA issues. Army funding authorization also has been streamlined; base managers now carry authority for expending up to \$10 million (rather than \$5 million) in cleanup costs without upper-management approval.

FFRRO recognized that the reorganization has improved the Army's information network and has allowed increased involvement of the AEC. Wynn is working with the Army to help ensure continuing base cleanup progress during transition to the new management structure, and asks that any regional problems with the approach be brought to her attention.

*FUDS Inventory:* In March 2002, EPA issued its policy regarding the privatization of FUDS. The policy requires development of a FUDS inventory, for which an Agency workgroup is establishing minimum data requirements. The inventory will include three information tiers: (1) basic site identifiers, (2) indication of EPA involvement, and (3) additional information collected by EPA regions. A policy amendment will be issued in Summer 2003 to: describe the FUDS inventory, information tiers, and data requirements; define terms such as "EPA involvement;" and establish a schedule for public release of the inventory. CERCLIS revisions to reflect the FUDS inventory will coincide with release of the policy amendment. It was noted that the CERCLIS-based FUDS inventory will not be subject FOIA requests. FFRRO plans to update the Corps of Engineers soon on development of the inventory, and to discuss with the Corps any potential problems that may be posed by public disclosure of the inventory's information on UXO.

*Impediments to Cleanup Progress:* Tracey Seymour (FFRRO) provided an overview of FFRRO's ongoing evaluation of potential impediments to progress in federal facility cleanups and to meeting requirements for property transfer. The evaluation was initiated in response to continued DOD and DOE concerns that the process needs streamlining. FFRRO plans to obtain Regional input for developing a streamlining case study that will help to define cleanup phases where progress is impeded, potential documentation overloads, and elements of EPA oversight and decision-making. Regional Forum members expressed belief that funding and contracting delays contribute to extended schedules for many projects. Through the Forum, FFRRO will request each Region to specify (with examples) 3-5 elements of the federal facility cleanup process that work well and 3-5 elements that work poorly. FFRRO also will solicit additional input from DOD regarding its perception of the cleanup impediments.

*Federal Facility Property Privatization:* An FFLC interagency workgroup currently is addressing the issue of property privatization. As defined by the workgroup, “privatization” relates to properties where: (1) a non-federal agency has taken title, (2) title transfer has occurred through the “early transfer” process, and (3) the property transferee will conduct environmental cleanup. Privatization is not equivalent to “out sourcing,” which involves performance-based contracts for tasks such as waste disposal or commissary operations. DOD is increasingly taking advantage of the privatization approach, which allows purchasers to obtain property at reduced costs and relinquishes DOD from cleanup responsibility.

The process of privatization introduces questions concerning the status of existing FFAs, as well as EPA’s relationship to the transferee. FFRRO believes that legal aspects of an FFA may be preserved by: (1) pursuing DOD action when cleanup is not adequately addressed by a transferee, or (2) issuing a legal order to the transferee. Other privatization questions concern the status of existing RCRA permits and the involvement of land reuse authority. FFRRO recognizes that a Headquarters position should be established to help regions address privatization issues.

*Performance-Based Contracting:* DOD is increasingly using performance-based, fixed-price contracts for site cleanup. Forum members expressed concern that, although such contracts are effective for clearly-defined tasks (such as landfill cap installation), they are ineffective when used for subjective tasks (such as environmental coordination, risk assessment, site characterization, or long-term monitoring) and do not consistently involve adequate involvement in cleanup decision-making.

The Forum also expressed concern that performance-based contracting often increases EPA’s burden for oversight of sites where contractor costs are minimized in order to remain within the contract budget. Suggestions for ensuring the adequacy of these contract arrangements included the addition of contingency fees, incorporation of flexibility for technology/process optimization in the field, and EPA involvement in developing contract scopes of work. FFRRO will discuss this issue with DOD and will offer the Forum’s suggestions.

### **OB/OD Guidance**

Dave Reisman (NRMRL-Cincinnati) requested the Forum’s input on a recent request from Region 3 for guidance on open burning/open detonation (OB/OD) of hazardous material. OB/OD issues are not addressed in FFRRO’s UXO policy or handbook but are subject to RCRA regulations on corrective actions. EPA generally discourages OB/OD but recognizes that states often allow the approach to be used at federal facilities for UXO disposal. Forum members suggested that the guidance could provide an opportunity for states and the regulated community to learn about UXO disposal options, and to specify EPA’s preference for the use of a detonation chamber rather than OB/OD. FFRRO will pursue discussion of this issue with EPA’s RCRA office.

### **Sediment**

Steve Hirsh (Region 3) provided an update on various activities involving sediment-contaminated sites. EPA released for public comment a draft sediment policy in March 2003, and will issue a final sediment guidance in Fall 2003. EPA also is developing sediment fact sheets and a training session. In addition, sediment issues continue to be addressed by NARPM.

**Asbestos**

Mike Overbay (Region 6) described problems encountered at BRAC facilities in Colorado where asbestos was found in soil following demolition of asbestos-containing buildings. As a result, the State of Colorado expressed intent to suspend BRAC property transfers until the asbestos was removed to below detection levels. EPA's authority for enforcing asbestos cleanup standards under TSCA or other regulatory programs remains unclear. Similar problems in Region 3 were encountered but found to pose no significant risk, and property transfer was completed within 2-3 years.

**Institutional Controls**

Members provided updates on the cleanup status at sites with RODs containing IC provisions. IC issues common to most regions included: determination of where ICs should be required, resolution of unexpected findings where ICs are in place, unclear responsibility for IC maintenance, and IC management under performance-based contracts. EPA's new IC policy does not include information specific to federal facilities. The Forum discussed potential methods for formalizing a consistent IC policy applicable to federal facilities, including development of a companion policy document or a technical issue paper.

**Perchlorate**

Chris Villarreal provided a summary of recent activities concerning perchlorate-contaminated sites. A perchlorate training module was developed earlier in 2002 for the "federal facilities remediation seminar" and was presented in Dallas in January and at EPA Headquarters in April. Texas Tech University has published findings from its first phase of studying the occurrence of perchlorate in the High Plains region of Texas, and will release the results of the study's second phase in August 2003. It was noted that recent DOD Headquarters' statements, which indicated site characterization at potential perchlorate-contaminated sites should occur smoothly, conflict with Air Force indications that no DOD funding or guidance has been provided for this purpose.

Until a maximum contaminant level (MCL) for perchlorate is established (in an estimated 2-3 years) EPA recommends a cleanup goal of 4-18 parts per billion in drinking water. A draft FFF request for technical assistance from EPA's National Exposure Research Laboratory was distributed to the Forum for review and comment.

**Open Discussion**

The Forum discussed other pending or new issues. Significant issues included the Agency's development of a multi-tier decision tree for use in establishing cross-program cleanup levels. In addition to the recent questions posed by perchlorate contamination, other chemical-specific issues are anticipated, such as an increased number of federal facilities sites with potential contamination from 1,4-dioxane. Similarly, a potential reduction in the MCL for TCE is likely to significantly impact cleanup programs at federal facilities. The Air Force, alone, estimates that a lower MCL for TCE would require the Air Force to expend approximately \$5 billion in re-evaluating ROD decisions and conducting additional site investigations.

Discussions were closed with a reminder for regional participation in the Forum's monthly teleconferences and for regional submission of new issues and updates.

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